

20000406.ba v02\_n857.bam.20000406

>From ???@??? Thu Apr 6 13:04:55 2000 -0500  
Date: Thu, 6 Apr 2000 13:02:11 CDT  
From: Old Tube Radios <boatanchors@theporch.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: BOATANCHORS digest 2857  
Message-Id: <20000406170243.6FBDA274AF@devel143.theporch.com>

BOATANCHORS Digest 2857

Topics covered in this issue include:

- 1) RARE AUDIO BOOK.... The Recording and Reproduction of Sound by Oliver Read.  
by Robert Ross <robross@odyssey.on.ca>
- 2) RADIO HandBooks 1942 and 1946 for SALE  
by Robert Ross <robross@odyssey.on.ca>
- 3) Lafayette KT-320 Manual Needed  
by Robert Kemp <rkemp@mr.net>
- 4) RE: Speaker And Output Transformer Questions  
by "Bill Hawkins" <bill@iaxs.net>
- 5) Re: Speaker And Output Transformer Questions  
by "Garey Barrell" <k4oah@mindspring.com>
- 6) Re: Japanese survival or spy radio?  
by "Hue Miller" <kargokult@proaxis.com>
- 7) Re: Lafayette KT-320 Manual Needed  
by "Hue Miller" <kargokult@proaxis.com>
- 8) Re: Radio Bygones - AN/GRC 109  
by David Prince <davprin@gil.com.au>
- 9) Speaker and Output Transformer Questions  
by Liles and Naomi Garcia <naomi@ftconnect.com>
- 10) Re: Lafayette KT-320 Manual Needed  
by "Hue Miller" <kargokult@proaxis.com>
- 11) Beasted by test equipment (?)  
by Michael N HoN Hopkins <mnhopkins@juno.com>
- 12) False Authority Syndrome  
by Chuck Swiger <cswiger@widomaker.com>
- 13) RE: Lafayette KT-320 Manual Needed  
by "Jim Berry" <basalop@gte.net>
- 14) RE: Lafayette KT-320 Manual Needed  
by "Ed Sieb" <sieb@sympatico.ca>
- 15) RE: Lafayette KT-320 Manual Needed  
by "A. B. Bonds" <ab@vuse.vanderbilt.edu>
- 16) Re: Speaker And Output Transformer Questions  
by Gary Schafer <gschafer@mediaone.net>
- 17) Re: Japanese survival or spy radio?  
by William Donzelli <aw288@osfn.org>

-----  
Message-Id: <3.0.32.20000405230052.0071469c@mail.odyssey.on.ca>  
Date: Wed, 05 Apr 2000 23:00:53 -0400  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Robert Ross <robross@odyssey.on.ca>  
Subject: RARE AUDIO BOOK.... The Recording and Reproduction of Sound by  
Oliver Read.  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Hello:

I have the following Audio Book for Sale.....

PRICE is in USA Dollars....and Shipping is Extra.

Please email me directly at..... robross@odyssey.on.ca to  
reserve this Book.

RARE AUDIO BOOK.... The Recording and Reproduction of Sound by Oliver Read.  
2nd Edition Revised and Enlarged. Printed in USA 1954 by Howard W. Sams. A  
Complete Reference Manual on Audio for the Professional and Amateur. Large  
hard Covered edition 790 Pages. Loaded with Photos of Early Audio/Hifi Gear  
and Lots of Charts and Illustrations. Covers all aspects of Audio Recording  
and Reproduction. This is "THE BIBLE" of Audio!! Very hard to find Book in  
Excellent Like new Condition. Has a Dust Jacket which is a little  
Rough...but the Book is Very Nice and Clean!

A Picture of the Book can be seen at the following URL.....

<http://www.odyssey.on.ca/~robross/Pictures/ReadSound.jpg>

PRICE is.....\$25.00 USA Dollars + Postage.

Thanks/Regards....ROB VA3SW

-----  
Message-Id: <3.0.32.20000405231838.0071bd00@mail.odyssey.on.ca>  
Date: Wed, 05 Apr 2000 23:18:40 -0400  
To: Old Tube Radios <boatanchors@theporch.com>  
From: Robert Ross <robross@odyssey.on.ca>  
Subject: RADIO HandBooks 1942 and 1946 for SALE  
Mime-Version: 1.0

Content-Type: text/plain; charset="iso-8859-1"  
Content-Transfer-Encoding: quoted-printable

Hello:

I have the following RADIO Handbooks for sale...these are the West Coast Handbooks published by "RADIO" Magazine.=20

Please email me direct at     robross@odyssey.on.ca to reserve any of these Books.

Thanks/Regards...ROB VA3SW

#####  
#####  
RADIO Handbook 9th Edition 1942. Printed in USA Editors and Engineers. Hard Cover Book with Beige Cover. 640 Pages. Similar to the ARRL Handbooks but Published on the West Coast. Lots of Photos, Illustrations, and Loaded with Theory for the Tube Radio Era!! The Back of the Book has an Ad section with Lots of Old Boatanchor ads. VG Condition and Clean. Cover is Somewhat Faded. Writing inside Covers.=20

For a Photo of the Book.....  
<http://www.odyssey.on.ca/~robross/Pictures/Hdbook9.jpg>

PRICE is.....\$15.00 USA Dollars + Shipping  
#####  
#####  
RADIO Handbook 10th Edition 1946. Printed in USA Editors and Engineers. Hard Cover Book with Beige Cover. 704 Pages. Similar to the ARRL Handbooks but Published on the West Coast. Lots of Photos, Illustrations, and KLoaded with Theory for the Tube Radio Era!! The Back of the Book has an Ad section with Lots of Old Boatanchor ads. VG Condition and Clean. No writing!=20

For a Photo of the Book.....  
<http://www.odyssey.on.ca/~robross/Pictures/Hdbook10.jpg>

PRICE is.....\$15.00 USA Dollars + Shipping  
#####  
#####  
Robert S. Ross VA3SW  
London, Ontario CANADA=20

Antique/Vintage Radio Enthusiast  
Amateur Radio Stations VA3SW/VE3JFC

Defy Physics.....Play Table Tennis!! (Ping Pong with an Attitude)

=AB=A4=BB=A5=AB=A4=BB=A7=AB=A4=BB=A5=AB=A4=BB=A7=AB=A4=BB=A5=AB=A4=BB=  
=A7=AB=A4=BB=A5=AB=A4=BB=A7=AB=A4=BB=A5=AB=A4=BB=A7=AB=A4=BB=A5=AB=A4

-----  
Message-ID: <38EC20E7.FE0@mr.net>  
Date: Wed, 05 Apr 2000 22:30:15 -0700  
From: Robert Kemp <rkemp@mr.net>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Lafayette KT-320 Manual Needed  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

If anyone has a manual for this Lafayette Kit, I'd sure like to get  
ahold of one?

Let me know a copying price/and-or/price to purchase if it's excess to  
your needs.

Could also use the two tuning knobs if someone has a junker! Mine are  
sorely damaged.

Thanks to all in advance.....enjoyed the info on audio  
transformers/output/impedances, etc. might just have to dig the old  
handbook out again!

Bob.

-----  
From: "Bill Hawkins" <bill@iaxs.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: RE: Speaker And Output Transformer Questions  
Date: Wed, 5 Apr 2000 23:04:07 -0500  
Message-ID: <001a01bf9f7d\$276ac3e0\$0b0aa8c0@normandale>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

My apologies for being too brief. I did not intend to insult  
anyone's intelligence. My wife once called the stuff on the  
net "shared ignorance" and the term stuck because it was apt.  
There is no way of telling truth from bs from faulty memory  
without citing a reference. That is, when you don't have  
personal knowledge of the subject. If someone on this group  
said that mistracking of the oscillator section can make a  
superhet seem dead, no one would question it.

I remembered a sharp rise in the current near resonance of the speaker I was measuring. I'd forgotten about the sharp drop next to it. And I didn't cite a reference, so I was sharing my ignorance. But I've never gotten over the fact that the concept of speaker impedance as one number seemed entirely bogus after I tried to measure it 35 years ago.

I'd like to know the basis for rating a speaker's impedance, but perhaps this discussion is not of interest here. Then again, maybe it is as open-ended as a discussion of antennas, which has been discouraged in the past.

Regards,  
Bill Hawkins

-----  
Message-ID: <000001bf9f82\$d0eb2720\$729056d1@default>  
From: "Garey Barrell" <k4oah@mindspring.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Speaker And Output Transformer Questions  
Date: Wed, 5 Apr 2000 23:25:05 -0400  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

The Audio Cyclopedia  
Howard M. Tremaine, D.Sc., FAES  
First Edition - First Printing April, 1959  
Howard W. Sams & Co., Inc.  
The Bobbs-Merrill Company, Inc.

20.89 How Does the Impedance of a Loudspeaker Voice Coil Vary? -- At the low-frequency resonant point and at the higher frequencies, the voice-coil impedance rises to several times that at the mid-range frequencies. This results in certain frequencies being radiated at a greater intensity and producing peaks in the reproduction.

20.90 At What Frequency is the Nominal Impedance of a Loudspeaker Rated? -- Generally 400 cps. The DC resistance of the voice coil is approximately three-fourths the nominal impedance.

Garey, K40AH  
Atlanta

----- Original Message -----  
From: Bill Hawkins <bill@iaxs.net>

To: Old Tube Radios <boatanchors@theporch.com>  
Sent: Wednesday, April 05, 2000 9:47 PM  
Subject: RE: Speaker And Output Transformer Questions

> Well, we now have a set of conflicting opinions on this subject.  
> No one has referenced an authority. Does one exist, or do we go  
> on sharing our ignorance - something email is really good at.  
>  
> Bill Hawkins  
>  
>

-----  
Message-ID: <004001bf9f89\$daf52ca0\$9bc36ac6@oemcomputer>  
From: "Hue Miller" <kargokult@proaxis.com>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Japanese survival or spy radio?  
Date: Wed, 5 Apr 2000 22:34:53 -0700  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

-----Original Message-----  
From: Richard Post <post@ouvaxa.cats.ohiou.edu>

|I bragged on this group as the cognoscenti for lots of stuff including spy  
|and survival radios. Tom Stranko wrote asking for info and took 16  
|pictures of his Japanese-made survival or spy radio. Can anyone help him  
|with proper identification

--undoubtedly the restaurant owner can read most of the characters on  
this radio, including the "SECRET" character. (That's probably equal  
to U.S. military term "RESTRICTED".)

Oftimes i think the ham license test should do away with any code  
requirement, just hand the tested a mystery box such as this, and  
have tested describe what the unit is. Popping the unit out of the  
case should swiftly verify that there is no way it could be a spy  
radio. Survival radio is a quite a clever guess, i think. And really not  
too far from its category of communications device, which is short  
range voice/ tone telegraphy ( "A3, A2" ). Of course, it's a combat  
walkie talkie. This is the \*most\* commonly seen Japanese  
military radio.

I would rate it and accessories in this order of increasing rarity: radio, leather radio case, headphone/ throat mic, generator, antenna elements, canvas battery bag, U.S. military manual for the radio ( much better than the Japanese manual for their own radio), Japanese manual. But, this is purely my own opinion.

The tube can be replaced by a US type 19, one with straight sides. The radio operates down into CB range, so you can monitor 15 or so channels at once (superregen), or maybe talk to the simple kid's toy type modern walkie talkies on 27 or 49 MHz. I think a superhet receiver would be too narrow to accomodate the drifting, FMing signal from the 94/6.

Mr. Howard may well be able to supply you with a photocopy of the US military TB-E (Technical Bulletin, Enemy equipment) for this radio. It's really worth looking at, the sketches will give you an understanding of how it was used, and the schematic and data are more useful than that little schematic with the set. ( If this doesn't pan out, you can maybe cajole me, altho i do things on my own schedule.)

We've been over some of this ground already....but BTW, the 94 part means ~ "model year" 1934. Similar to 5-meter superregen xcvs seen in QST, Shortwave Craft, and Frank Jones books. Japanese nomenclature can be quite confusing, and different sources translate it differently. If i was going to for example display it for folk unfamiliar with the nomenclature, my tag would read,

MODEL YEAR 94 TYPE 6

Others on here know more about this, but it has something to do with that being the 2594th year of the Japanese calendar.

Another Japanese set, the 94/5 one-tube MF/ HF transmitter, part of rec + trans set, uses a quite similar tube with similar power class, like the 19 tube, but uses a much heavier filament, drawing about 1 amp at 5 volts, i think that was to impart some "thermal stability" to the tube as the crank generator speed varies. I'm sure that variation in filament voltage affected the bandwidth of 94/6 transmission, as filaments of these low-current battery tubes can be even audio modulated.

So, get it working again! The moment of such an ancient set's coming back to life is a trip!

Hue Miller

-----  
Message-ID: <004701bf9f8b\$7dbd6d20\$9bc36ac6@oemcomputer>

From: "Hue Miller" <kargokult@proaxis.com>

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: Lafayette KT-320 Manual Needed  
Date: Wed, 5 Apr 2000 22:46:37 -0700  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

-----Original Message-----

From: Robert Kemp <rkemp@mr.net>

|If anyone has a manual for this Lafayette Kit, I'd sure like to get  
|ahold of one?

--If no one comes forth with help, you could  
contact Mr. Markavage "The Manual Man"  
who adverts in ER, and get to hold your very own excellent quality copy.  
BTW, per 'Electronics Illustrated' magazine,  
ca. 1964 or so, the <Official transmitter> to  
match with this receiver was the Ameco  
AC-1. Complete ham station in the under  
\$150 class.  
Hue Miller

-----  
Message-ID: <38EBBB9D.6EB8BF34@gil.com.au>  
Date: Thu, 06 Apr 2000 08:18:05 +1000  
From: David Prince <davprin@gil.com.au>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
CC: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Radio Bygones - AN/GRC 109  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Australian Army also used GRA-71's with PRC-25 & 77's with  
the help of an ADAPTOR SET, MORSE TRANSMISSION, MX-F2 which  
attached to the accessory socket on top of the sets.

Cheers  
Dave Prince

ragnar otterstad wrote:

>

> Thanks for a very nice article in the latest issue,  
> which just arrived. Excellent photos.



>  
> Did you know that PRC 316 shared the GRA71 with GRC  
> 109 ?

-----  
Message-ID: <38EC2C91.4E76C44B@ftconnect.com>  
Date: Wed, 05 Apr 2000 23:20:01 -0700  
From: Liles and Naomi Garcia <naomi@ftconnect.com>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Speaker and Output Transformer Questions  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Good evening Everybody,

I am the culprit who asked the original questions about this topic.  
Thanks to Bill Hawkins for saying that he enjoyed the topic over the  
last two days. I want to thank everyone for their contributions,  
because I have learned a lot. The answers about the 500 ohm output  
impedance used on Hallicrafters receivers over so many years makes a lot  
of sense. Thanks much!!!

I did not invent the output impedances for some of our old radio  
speakers. The Hammarlund family, HQ-120-X, HQ-129-X, HQ-140-X,  
HQ-140-AX, HQ-150, specify a 6 ohm speaker in the receiver's manual. My  
Silvertone Precision Series 3 receiver specifies a 5 ohm speaker, so do  
some Howard receivers. ( The Silvertone Precision Series 3 is a  
repackaged Howard 450A according to Moore's book. ) My question is were  
the original speakers supplied for these receivers built with the  
specified impedance, or was everything manufactured as 4 ohms. I know  
that a 4 ohm speaker will work with these receivers, but I was just  
wondering if the original receiver manufacturers delineated speaker  
impedance to that degree and maybe a reason why. Along with this  
question is did the speaker manufacturers make 4 ohm, 5 ohm, and 6 ohm  
speakers back then?

Thanks much for the great discussion!!

Regards from Aloha, Oregon,  
Liles Garcia  
naomi@ftconnect.com

-----  
Message-ID: <003301bf9f9e\$0eb42780\$8bc36ac6@oemcomputer>  
From: "Hue Miller" <kargokult@proaxis.com>  
To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: Lafayette KT-320 Manual Needed  
Date: Thu, 6 Apr 2000 00:59:32 -0700  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

|If anyone has a manual for this Lafayette Kit, I'd sure like to get  
|ahold of one?

BTW, i was just the other night looking at an  
old issue of "Radio Fun" magazine ( Wayne  
Greene enterprise, now extinct ) that had a  
review of a somewhat similar receiver, the  
lower priced KT-200. It mentioned a couple  
easy mods: said there was a power  
resistor in the rectifier are that should be  
moved away from the tuning circuits (if enuff  
interest i can look up and quote more  
precisely), which improves the short term  
stability of the receiver from startup to warm.  
Also the capacitor that couples the BFO to  
detector was increased 2 or 3 times orginal  
value - article said original injection too low.  
Perhaps one, 2, or none of these will apply  
to your set and prove useful.  
Article also said one plus of the receiver was  
that worked very well on MW BC band. I  
would expect same for KT-320, as circuit  
is very similar in essentials and uses basically  
same components, such as the nice large  
IF transformers.  
Hue Miller

-----  
To: Old Tube Radios <boatanchors@theporch.com>  
Date: Thu, 6 Apr 2000 06:37:06 -0700  
Subject: Beasted by test equipment (?)  
Message-ID: <20000406.064632.-513271.3.MNHopkins@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit  
From: Michael N HoN Hopkins <mnhopkins@juno.com>

Visited W5FRS yesterday and commented on my new interest in vintage test equipment flowing from a McMurdo Silver VOMAX that is yet to read AC (mainly 'cause I don't understand its two dual triode circuit).

My interest in that field is like my interest in Quantum Mechanics -- I know so little that the learning curve is near vertical.

Anyway, a Jackson model 650 "Condenser" tester followed me home for evaluation and the coal oil, (Kerosene to Yankees) in the Liquid Wrench drew comment from the YLs as it did its thing on an outdoor stored TS-413 U.

Just need to find my Triplet VOM now. I hid it from the preacher 'cause it says "666" on it.

ab5L -- Michael N. Hopkins MNHopkins@JUNO.com  
Box 226841, Dallas, TX 75222

Archiving receive converters and the Golden Age of 6M -- 1956-58

-----  
Message-Id: <3.0.1.32.20000406083630.0090f470@thomasst>

Date: Thu, 06 Apr 2000 08:36:30 -0400

To: Old Tube Radios <boatanchors@theporch.com>

From: Chuck Swiger <cswiger@widomaker.com>

Subject: False Authority Syndrome

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

>My wife once called the stuff on the net "shared ignorance" and the term  
>stuck because it was apt. There is no way of telling truth from bs from  
>faulty memory without citing a reference.

A good article about that is at <http://www.kumite.com/myths/fas/>  
Referances, verification, rigorous testing - no doubt truth can  
be difficult sometimes.

BA Content - My NC-125, a faithful bedside set for about two years  
w/ daily use (sometimes power on twice on weekends) is going to  
a well deserved retirement as a functioning unit. It does have one  
of those 'soft start' resistor/thermal switch combo's which may have  
helped. In it's stead goes Paul's old BC-348 for nightly use - only  
thing is I'll have to do some CW OSC alignment, hopefully this weekend.

Lastly I'm looking fwd to the Raleigh 'fest 4/9.

Chuck  
kb4new

cswiger@widomaker.com

-----  
From: "Jim Berry" <basalop@gte.net>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: RE: Lafayette KT-320 Manual Needed  
Date: Thu, 6 Apr 2000 07:28:06 -0700  
Message-ID: <000001bf9fd4\$536563e0\$9a020f3f@default>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hello Hugh, the feller who needs the manual for the 320, and anyone else who might be interested.

Back in 1958 or 59, when I was a young whippersnapper, I saw a picture of a KT-200 in a magazine. Wow! I did not know a thing about radio, but anything that looked as good as that had to be a good one.

Well years went by. Never was impressed by ham grade gear. Commercial or military gear for me. But I always had this thing for a KT-200. Well, a couple of years ago I bought one. Neat radio. Nothing special about it, but I thought it would be a great project to fix up and tweak. It is still sitting in my pile of pending projects. Have to admit, I have not done much with the receiver, but one thing for sure, I will not part with it.

Mine has a socket for a voltage regulator tube. Also a mod has been made in attempt to get more BFO injection. Yes, it is on the feeble side. Someone had added a cap to replace the BFO injection gimmick. It really did not make any difference. There are some other tricks one could pull to improve the injection.

I have the regular schematic and op manual (copy), but would like to add the original assembly manual to my collection.

That receiver when it came assembled was a HE-30. KT-200 was the kit.

73 Jim K7SLI

-----  
From: "Ed Sieb" <sieb@sympatico.ca>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: RE: Lafayette KT-320 Manual Needed

Date: Thu, 6 Apr 2000 10:53:02 -0400  
Message-ID: <LOBBJHOL00HLIPLONIAFKEHJCLAA.sieb@sympatico.ca>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

<sigh>

Ah.... memories! I thought that model# sounded familiar.  
Yup, the KT-320 was the kit version of the HE-30. The HE-30 was made by  
TRIO (Kenwood). Here in Canada,  
a Canadian company, AGS, was the TRIO distributor. Trio marketed the  
receiver under the 9R59 model.

I lusted after that receiver, and after one winters' worth of delivering  
newspapers, I could finally afford one. My first real receiver! It had all  
the "professional" features! RF gain, BFO, band spread and Holy Cow, a real  
built-in Q-multiplier! This thing could receive CW and almost SSB too! A  
semi-decent performer on 80 and 40, it was mediocre on 20 and deaf as a  
post on 10. But, I cut my eye-teeth with it, and used it to listen to W1AW  
and got my ticket with it. When I got my AT-1, I finally had a real ham  
station. I was King of the World!

73  
Ed  
VA3ES

-----  
Message-Id: <3.0.1.32.20000406102335.01396a00@vuse.vanderbilt.edu>  
Date: Thu, 06 Apr 2000 10:23:35 -0500  
To: Old Tube Radios <boatanchors@theporch.com>  
From: "A. B. Bonds" <ab@vuse.vanderbilt.edu>  
Subject: RE: Lafayette KT-320 Manual Needed  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 10:53 AM 4/6/00 -0400, you wrote:

><sigh>

>

>

>Ah.... memories! I thought that model# sounded familiar.

>Yup, the KT-320 was the kit version of the HE-30. The HE-30 was made by

>TRIO (Kenwood). Here in Canada,

>a Canadian company, AGS, was the TRIO distributor. Trio marketed the

>receiver under the 9R59 model.

>

>I lusted after that receiver, and after one winters' worth of delivering  
>newspapers, I could finally afford one. My first real receiver! It had all  
>the "professional" features! RF gain, BFO, band spread and Holy Cow, a real  
>built-in Q-multiplier! This thing could receive CW and almost SSB too! A  
>semi-decent performer on 80 and 40, it was mediocre on 20 and deaf as a  
>post on 10.

'Bout a year ago I found an HE-30 in a junk shop. It was in the original  
carton, with manual. It had been used little and put away. Dusted it off,  
checked it out, tweaked the alignment, bingo! (No paper caps, just  
ceramics, and the PS filter was just fine, thank you). A nice little rx,  
fairly hot on the low end, but like the man said, pretty deaf above about  
25 MHz. It uses 6B(a or e)6's for nearly everything. I would think it was  
a very good value at the time, certainly a better receiver than the  
alternatives (e.g., Knight-Kits). Blows the doors off my R100a.

73 A. B. Bonds

-----  
Message-ID: <38ECCDAE.EFF373F4@mediaone.net>  
Date: Thu, 06 Apr 2000 13:47:27 -0400  
From: Gary Schafer <gschafer@mediaone.net>  
MIME-Version: 1.0  
To: Old Tube Radios <boatanchors@theporch.com>  
CC: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Speaker And Output Transformer Questions  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi Bill

No offense taken. Hope I didn't sound too abrupt with my reply. It is  
difficult to sometimes to express ones true outlook not being face to  
face.

I think that it is important that we all ask questions of one another  
and challenge any statements that do not sound right. There is too much  
miss information that goes on. There are very few experts in anything  
and I am not real sure what an expert really is. If each of us shares  
the bits and pieces of knowledge we may have with each other we can all  
put together a little better picture of what goes on. There is no  
disgrace in someone being wrong or not exactly right on a subject. The  
important thing is to get the opinions and discussions out there to hash  
over. That is the way we learn. If there is a reference to quote or  
read, so much the better.

Ok time to jump down from the soap box!

On the subject of speaker impedance. It can be rather complex. Being  
somewhat of a Hi-Fi enthusiast as well as a ham, over the years I have

done a lot of reading and experimenting with speaker systems. (still don't know what I am doing) I am still trying to learn and have learned some things from the past few days discussions. In rereading one of my speaker books it says that the nominal impedance that a speaker is rated at is the impedance that is the lowest impedance that it drops to just above the resonant point. In other words, if you start at the bottom or zero and go up in frequency, it will be very low and then will peak at resonance and then drop to a low value and slowly rise from there. The frequency that the impedance is lowest at after the resonance peak is the point that is considered the nominal impedance of the speaker. As this book says the EIA standard frequency for speaker impedance is usually 400 hz. A particular speaker impedance curve that I am looking at at the moment shows the resonant frequency at 100hz with an impedance of about 32 ohms. At 200 hz impedance is 16 ohms. At 500 hz it is 8 ohms and stays there up to about 1500hz. At 2000 hz it is about 10 ohms. At 6000 hz it is about 16 ohms. At 20000 it is about 32 ohms. This is one particular speaker. Other types may give a very different curve of impedance rise. Put that same speaker in an enclosure and everything again is different.

>From what I understand about a speakers rated impedance it is rated in the range that most of the information is contained in. 400 to 2000 hz. But 400 hz is the EIA standard in most cases to have some finite reference point. Even that might be specked at a different frequency on some models.

I have not tried to measure the actual impedance of a speaker. Finding the resonance point and the lowest impedance point is easy to do. Drive the speaker with an audio oscillator with a resistor in series with one leg. Place an audio vtvm across the speaker. Tune the oscillator and see where the vtvm peaks at the low end of the speakers range. That is it's resonant frequency. You will also notice that the cone moves the most at that frequency. Continue up in frequency and find the lowest reading and that should be the frequency that it's impedance is rated at. Now if you want to get an idea of what happens when the speaker is put into an enclosure, just set the speaker face down on the table and again find it's resonance point. It will be in a different place! This is due to the loading of the cone from the table. Some enclosures are tuned so that you may see a double impedance peak that may fall above and below the speakers free air resonant point. This is done to taylor the response of the speaker/enclosure system.

There's more but don't want to bore everyone to death. If anyone doesn't agree, inputs are welcome!

Best regards  
Gary K4FMX

Bill Hawkins wrote:

> My apologies for being too brief. I did not intend to insult  
> anyone's intelligence. My wife once called the stuff on the  
> net "shared ignorance" and the term stuck because it was apt.  
> There is no way of telling truth from bs from faulty memory  
> without citing a reference. That is, when you don't have  
> personal knowledge of the subject. If someone on this group  
> said that mistracking of the oscillator section can make a  
> superhet seem dead, no one would question it.  
>  
> I remembered a sharp rise in the current near resonance of  
> the speaker I was measuring. I'd forgotten about the sharp  
> drop next to it. And I didn't cite a reference, so I was  
> sharing my ignorance. But I've never gotten over the fact  
> that the concept of speaker impedance as one number seemed  
> entirely bogus after I tried to measure it 35 years ago.  
>  
> I'd like to know the basis for rating a speaker's impedance,  
> but perhaps this discussion is not of interest here. Then  
> again, maybe it is as open-ended as a discussion of antennas,  
> which has been discouraged in the past.  
>  
> Regards,  
> Bill Hawkins

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Date: Thu, 6 Apr 2000 14:01:54 -0400 (EDT)  
From: William Donzelli <aw288@osfn.org>  
To: Old Tube Radios <boatanchors@theporch.com>  
Subject: Re: Japanese survival or spy radio?  
Message-ID: <Pine.SUN.3.91-FP.1000406135821.16421B-1000000@osfn.org>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

> The tube can be replaced by a US type 19, one with straight sides.

I know these tubes can be hard to find (like all of the other T bulbed ##  
tubes). I think I have one, if anyone needs it.

> MODEL YEAR 94 TYPE 6  
> Others on here know more about this, but it has something to do  
> with that being the 2594th year of the Japanese calendar.

Can I assume that this means the sixth model of radio introduced that  
year? And that other #94 sets with different type numbers may be  
completely different?



William Donzelli  
aw288@osfn.org

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End of BOATANCHORS Digest 2857  
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